TT1 - MI

Tangential tonearm

User Manual

Made in Germany

TT1-MI – Tonearm

Hi-Fi Components clearaudio electronic GmbH
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Dear audio enthusiast,

Thank you for your decision to purchase the Master Innovation TT1-MI tangential tonearm from Clearaudio.

Please take a moment to read this owner's manual to ensure correct set-up, avoid any potential damage and discover how to care for your Master Innovation TT1-MI so that it gives you many years of musical enjoyment and pleasure.

This section MUST be read before any undertaking connection or set-up, otherwise the warranty may become void.

Warnings

Do not expose the equipment to rain or moisture.
Do not remove the cover from the equipment.
No naked flame sources, such as lighted candles, should be placed on the equipment.
Never insert the oil into the precision bearing as this will result in damage of bearing.
Tonearm only suitable for installation on Clearaudio Master Innovation turntable.

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Contents

1. Package contents **4**

2. Package overview **5**

3. Front and rear view of assembled TT1–MI tonearm **6**

4. Assembly and operation **7**

5. Mounting the TT1-MI tonearm on the Master Innovation turntable **8-10**

6. Cartridge pre-adjustment / adjustment **10-12**

7. Technical data **13**

8. Transportation advice **14**

9. Service information **14**

10. Warranty **15**

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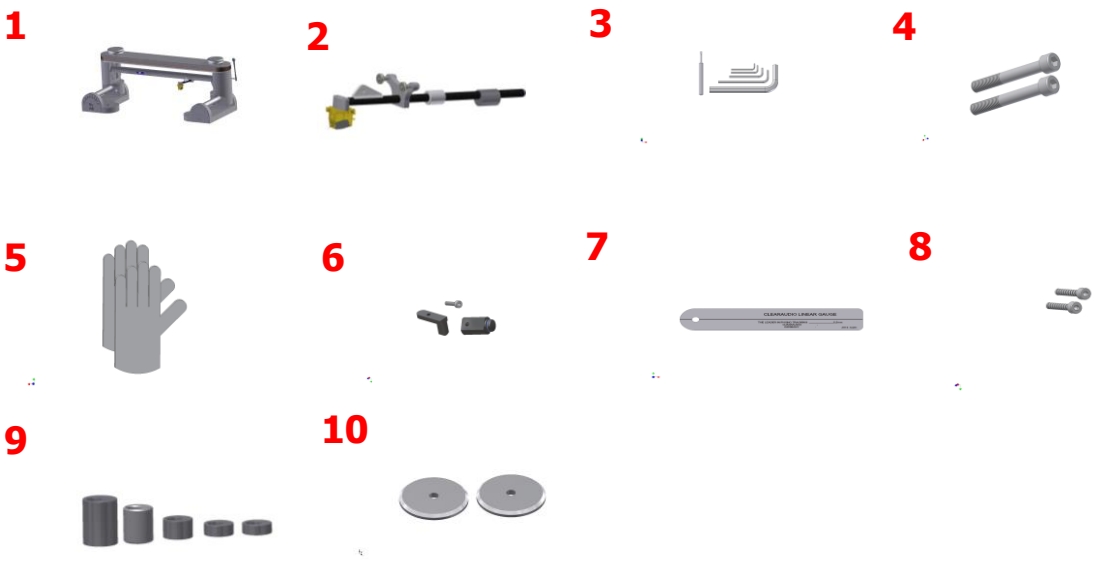
1. Package contents

The Clearaudio TT1-MI tangential tonearm is delivered in specially designed packaging to ensure its safe transport. Please check that the contents are as shown below and listed at the bottom of the page:



1	Tonearm chassis	**7**	Cartridge alignment gauge
2	Armwand, including cable	**8**	Cartridge mounting screws
3	Bag of hex keys (Allen keys) 1.5 mm/8mm	**9**	Main counterweights
4	2x large hex socket headed bolts	**10**	2x spacer discs
5	White gloves	**11**	User manual (not shown)
6	Glass tube assembly kit		

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2. Package overview

The TT1–MI is packed in a special foam packaging and comes almost completely assembled.

Picture 1: Package view

Please note:
The armwand is packed separately and need to be installed.

Picture 2: Armwand (shown with bearing carriage)

Additional parts, accessories and tools are also packed separately.

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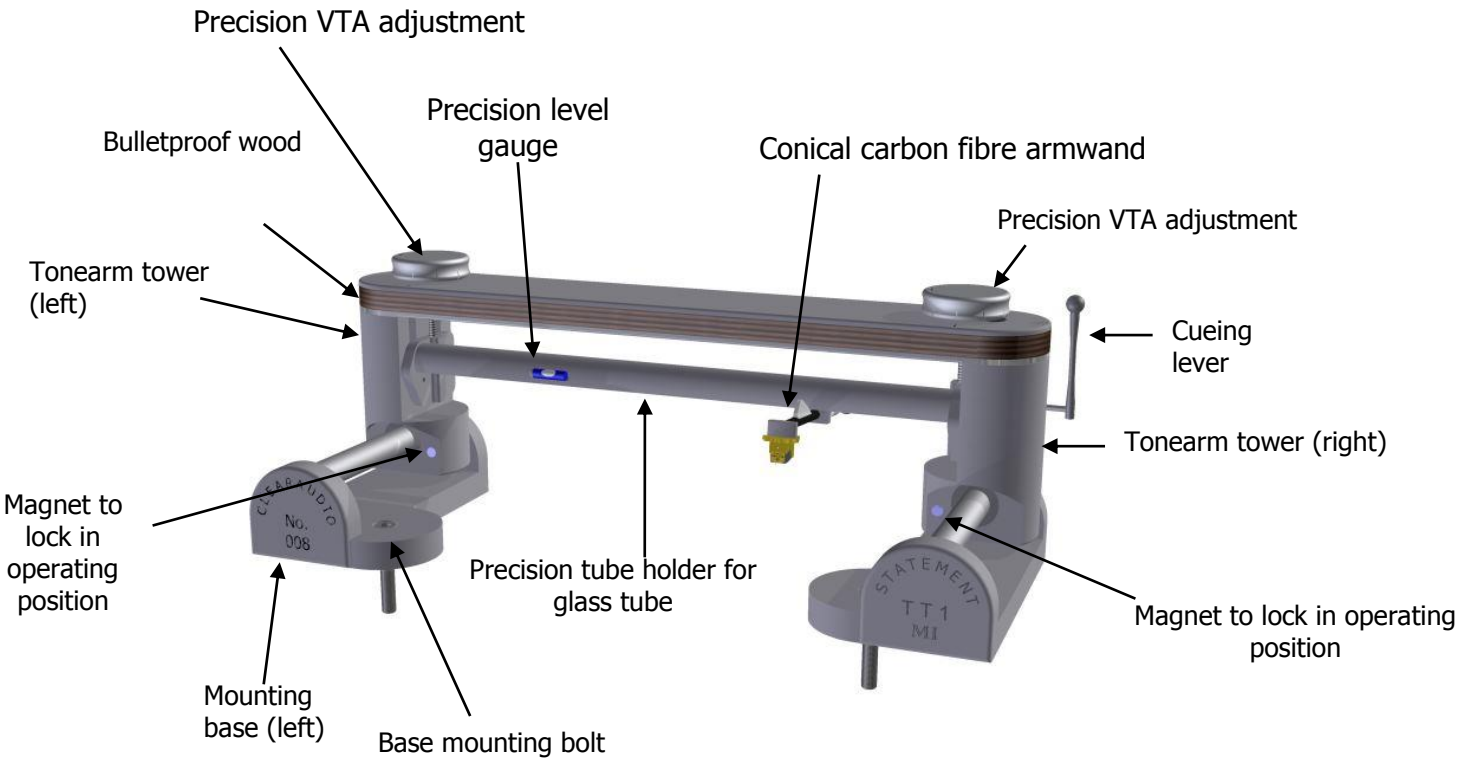
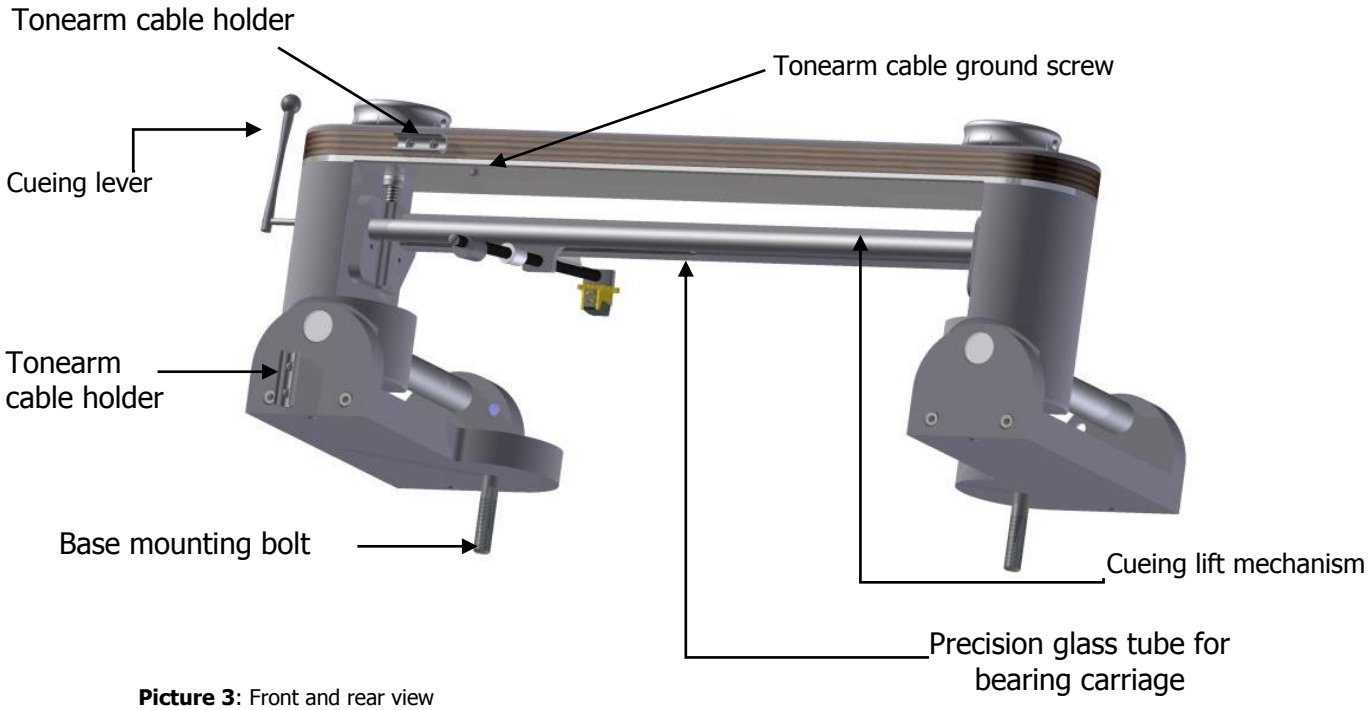
3. Front and rear view of assembled TT1–MI tonearm

Front view



Rear view



Picture 3: Front and rear view

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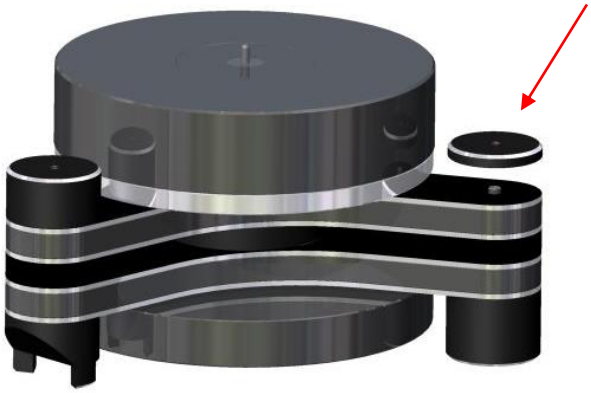
4. Assembly and operation

After checking that the package contents are as described, place the parts on a clean and flat surface in preparation for set-up. Assembly and set-up of the TT1-MI are quite straightforward, as most parts have been factory preassembled.

Please use the white gloves provided to avoid introducing scratches and/or fingerprints during assembly.

First, position the two spacer discs (see page 4, package content No. 10) onto the Master Innovation turntable. Please note, you may need to remove the previous discs/cylinders first. Please use only the spacer discs provided, as they are specifically height-matched for the TT1-MI tonearm.



Picture 4: Placing the stainless steel spacer discs onto the Master Innovation turntable

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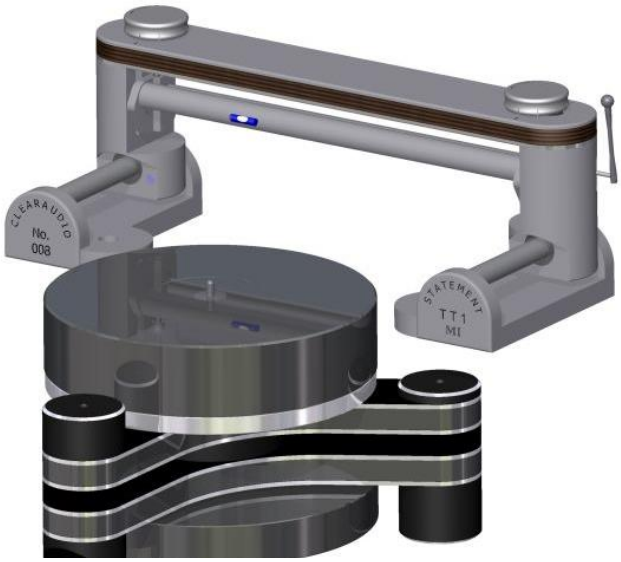
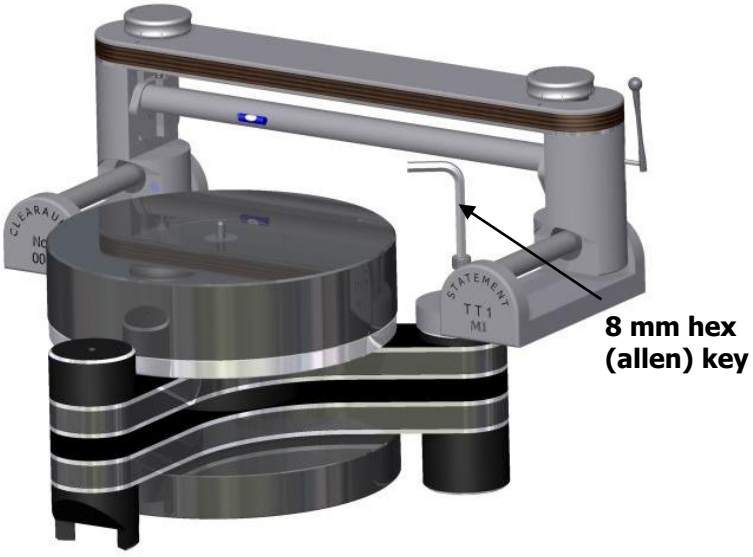
5. Mounting the TT1 tonearm on the Master Innovation turntable

Place the tonearm chassis on top of the two spacer discs. Lift it carefully, making sure that the sliding tonearm bridge is positioned to the rear of both sliding bases as shown in picture 5. While holding it in place insert the two large hex socket headed bolts provided (see page 4 package content No. 4) and tighten them (see picture 6).

Please note: Always hold the tonearm in place while tightening the mounting bolts.



Picture 5: Placing the tonearm chassis on the spacer discs



Picture 6: Tightening the mounting bolts

Please note: You may need to readjust the levelling of the Master Innovation turntable once you have fully completed set-up of the TT1-MI tonearm.

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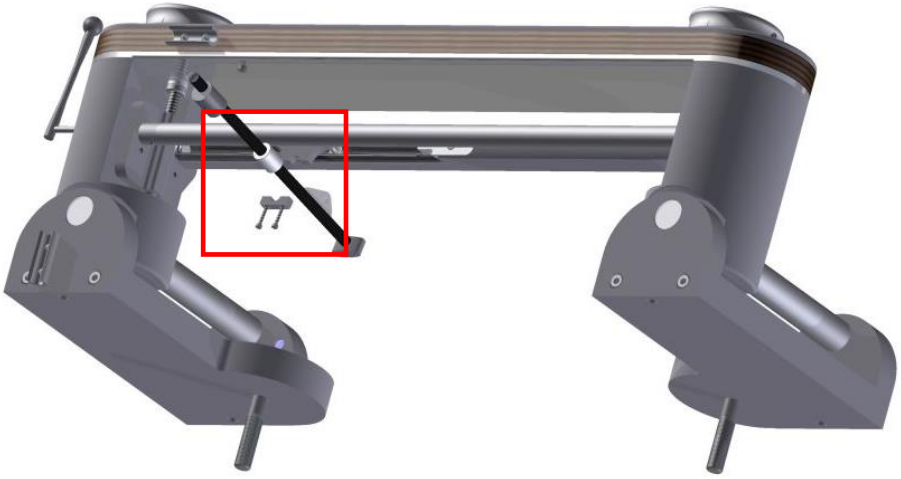
Please take great care in undertaking the following steps.

Picture 7: Pre-mounted bearing carriage and glass tube



Picture 8: Mounting of the armwand

Mount the armwand to the bearing carriage with the aluminium block and the two screws.

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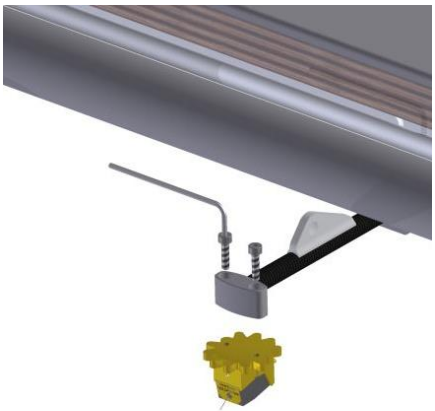
Picture 9: Mounted armwand

6. Cartridge pre-adjustment / adjustment

First mount the cartridge into the headshell using the two headshell screws provided.



Picture 10: Mounting of the cartridge

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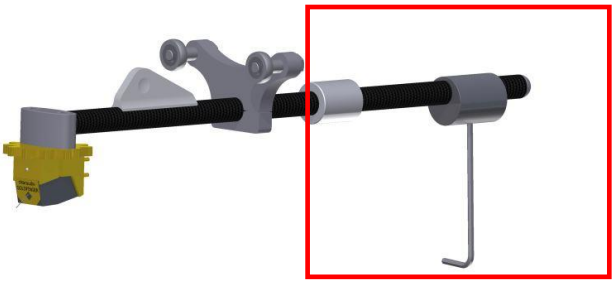
Slide the appropriate exchangeable counterweight over the back of the armwand tube and adjust the correct tracking force. Please hold the armwand carefully so as not to apply too much force to the bearings. For the best results we recommend using Clearaudio's Weight Watcher stylus pressure gauge (Art. No. AC094).

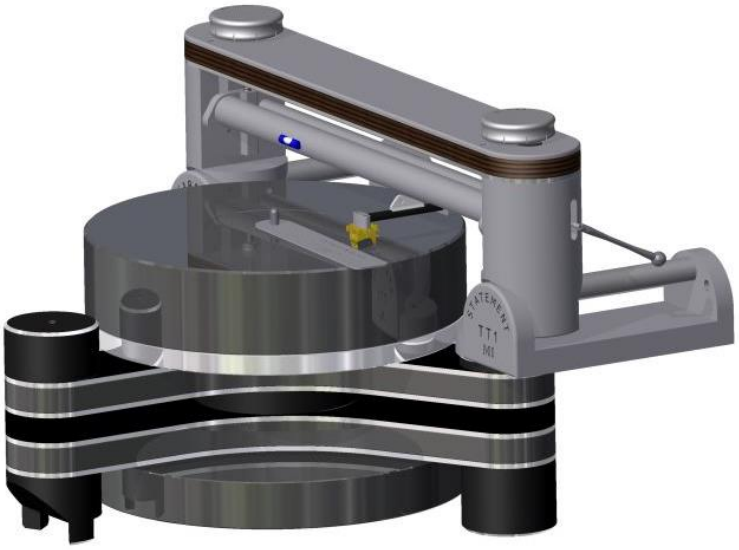
Example:

- For the Clearaudio Goldfinger use the 10g counterweight
- For the Clearaudio Titanium use the 5g counterweight



Picture 11: Counterweight adjustment

Turn the two knobs (wheels) of the precision VTA adjustment on top of the tonearm until the armwand axis is parallel to the record surface.



Picture 12: Cartridge pre-adjustments

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Cartridge adjustment

The correct tangential adjustment is essential. To ensure the correct adjustment, use the cartridge alignment gauge, which must first be placed on the spindle.

The diamond tip of the cartridge must be always aligned in the black line of the gauge. This fine adjustment can be realised by moving the armwand back or forwards.
Simply lock or unlock the screw on the bottom of the carriage.

Picture 13: Cartridge adjustment

Re-adjust the tracking force and set the cartridge Azimuth so that it is in a vertical position when viewed from the front. Make a final check of all the parameters – tonearm level, armwand level, cartridge alignment and tracking force.

Place a record onto the turntable platter in and make any final fine adjustments.

Attention: Before first use or after a long period of storage, please move the cueing lift up and down approximately 4-5 times so that the oil inside can flow allowing the cueing lift to operate smoothly.

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7. Technical data

Construction principle:	High-precision mechanical tangential tonearm, extremely low friction two point linear tracking design
Total weight:	8.6 kg, including armwand
Dimensions (mm):	Approx. 521 (w) x 190 (h) x 199 (d)
Dimensions (inches):	Approx. 20.51 (w) x 7.48 (h) x 7.83 (d)
Warranty:	10 years* (see section 10)

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8. Transportation advice

Should further transportation of the TT1-MI tonearm be necessary, please always use the original packing material. Otherwise serious damage could occur.

To avoid possible damage, the armwand should be removed for transportation.

If the TT1-MI tonearm is not in use for a long period, please cover the tonearm to protect it from dust.

The glass tube can be cleaned with pure alcohol.

Please make sure that the precision dry ball bearings are not be touched, cleaned or lubricated in any way. Please only clean the glass tube.

WARNING:
Never insert the oil into the precision bearing as this will result in damage of bearing.

9. Service information

If any servicing or repair of a Clearaudio product is necessary, please first contact your dealer or distributor. Alternatively contact Clearaudio directly and we will advise you of your nearest service location.

PLEASE RETAIN ALL ORIGINAL PACKAGING. You will need it if this product has to be transported and/or shipped. Any further questions you may have about this product should be directed to your local or dealer, or direct to Clearaudio at:

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10. Warranty

To benefit from the full Clearaudio warranty, you must fill out the relevant part of the warranty registration certificate /card and send it back to Clearaudio within two weeks of purchase. A warranty of 10 years will only be provided if the product is returned to us in its original packaging.

ENGLISH

WARRANTY
For warranty information, contact your local Clearaudio distributor.
RETAIN YOUR PURCHASE RECEIPT
Your purchase receipt is your permanent record of a valuable purchase. It should be kept in a safe place to be referred to as necessary for insurance purposes or when corresponding with Clearaudio.
IMPORTANT
When seeking warranty service, it is the responsibility of the consumer to establish proof and date of purchase. Your purchase receipt or invoice is adequate for such proof.
FOR UK ONLY
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